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MEMORANDUM

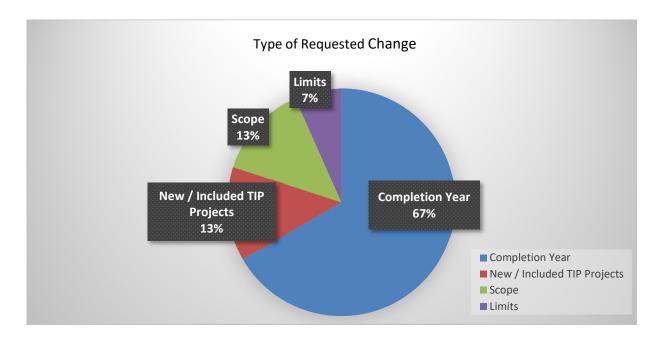
To: CMAP Transportation Committee

From: CMAP Staff

Date: January 7, 2020

Re: ON TO 2050/TIP Conformity Analysis & TIP Amendment

In accordance with the semi-annual conformity analysis policy, CMAP staff asked programmers to submit changes, additions, or deletions to non-exempt projects for inclusion in the regional air quality analysis of the FFY 2020-24 Transportation Improvement Program (TIP) and ON TO 2050. Of the changes requested, thirty projects require air quality conformity analysis. Below is a summary by type of requested changes.



If the TIP amendment is approved, thirty non-exempt projects will be included in the TIP. These types of projects are included in the conformity analysis because funding for phases beyond preliminary engineering has been identified in the TIP. Non-exempt projects with only preliminary engineering funding and exempt tested projects are excluded from conformity analysis.

This former exempt project, indicated a change in scope and became a new not exempt addition:

• TIP ID 02-94-0001: Willow Rd from E of Des Plaines River to Waterview Dr/Protection Parkway

The new not exempt projects are:

- TIP ID 09-20-0008: McLean Blvd from Spring St to Stearns Rd
- TIP ID 11-18-0005: Randall Rd from Alexandra Blvd to Polaris Dr/Acorn Ln
- TIP ID 12-19-0039: Manhattan-Monee Road from Ridgeland Ave to I-57; Manhattan-Monee Road @ Ridgeland Avenue

Other changes to existing projects are described below.

Limits are the cross-streets, mileposts or other boundaries which define the extent of a project.

The following RSP project begins the next phase with a change of its western termini:

• TIP ID 01-98-0114: I-190 O'Hare Access Roads from Bessie Coleman Dr. to Cumberland Ave, I-190 Access and Capacity Improvements (I-190 Access Improvements) - RSP 32 The sponsor indicates, due to the determination of the near term phase of I-80, a major change in limits to the future phase of its companion RSP project:

• TIP ID 12-12-0037: I-80 U.S. 30 to I-294 - RSP 37

The completion year indicates when a project is anticipated to be in service to users. The conformity analysis is conducted for selected analysis years between now and 2050. The analysis years are currently 2020, 2025, 2030, 2040 and 2050. If a change in completion year results in moving a project across an analysis year, the project must be revised in the conformity analysis.

The project sponsor indicates an earlier completion year for the following two projects, therefore requiring a revision to the conformity analysis:

- TIP ID 02-97-0001: IL 21 Milwaukee Ave from N of Sanders Rd to S of Euclid Ave
- TIP ID 10-17-0027: IL 83 Barron Blvd, IL 120 Belvidere Rd to IL 137 & at Atkinson Rd

These non-exempt projects crossed an analysis year and are included in the conformity analysis:

- TIP ID 03-99-0018: CH V62 Quentin Road from CH A50 Lake Cook Road to IL 68 Dundee Road
- TIP ID 07-09-0087: Wood St from Little Calumet River to US 6 159th Street
- TIP ID 08-00-0009: IL 53 from S of IL 56 Butterfield Rd to Park Blvd
- TIP ID 09-06-0023: Eldamain Road from River Road to W. Highpoint Road
- TIP ID 09-15-0015: US 30 from W of Dugan Rd to W of Ill 47
- TIP ID 09-96-0017: Longmeadow Pkwy Bridge Corridor from Huntley Rd to IL 62
- TIP ID 10-06-0020: US 45 IL 173 Rosecrans Road to Millburn Bypass
- TIP ID 10-09-0146: US 45 McHenry Rd from S of Millburn Bypass to N of IL 132 & at Millburn Creek
- TIP ID 10-09-0148: IL 137 Buckley Rd from IL 83 to Petersen Rd

 TIP ID 10-94-0007: US 45 Lake Ave from Rollins Rd to Washington St and US 45 from Washington St to N of IL 120

The following not exempt Regionally Significant Projects (RSP) crossed an analysis year:

- TIP ID 08-95-0024: IL 83 Kingery Hwy from 31st St to N of 55th St, 63rd St (south of) to Central Avenue - RSP 111
- TIP ID 09-12-0036: I-80 Reconstruction from Ridge Rd to US 30 Lincoln Hwy RSP 36
- TIP ID 10-07-0001: IL 60/IL 83 from IL 176 to Townline Rd (IL 60) RSP 10
- TIP ID 10-09-0024: IL 131 Green Bay Road from Russell Road to Sunset Avenue RSP 14
- TIP ID 10-09-0147: IL 83 Milwaukee Ave from Petite Lake Rd to IL 120 RSP 13
- TIP ID 10-09-0149: IL 173 Rosecrans Rd from IL 59 to US 41 (Skokie Hwy) RSP 15
- TIP ID 11-16-0008: IL 62 Algonquin Rd, IL 25 JF Kennedy Memorial Dr to IL 68 Dundee Rd - RSP 11
- TIP ID 12-16-0027: I-55 @ Ill 129, Ill 129 to Lorenzo Rd, I-55 Frontage Rds: Kavanaugh Rd to Lorenzo Rd & at Lorenzo Rd - RSP 34

The scope of a project is determined by the work types associated with the project.

- Non-exempt work types are expected to affect air quality and must be included in the conformity analysis. Examples of non-exempt work types are adding lanes to a road, interchange expansion, new bridge, and the major expansion of bus route service.
- Exempt tested work types do not require an air quality conformity analysis, but the region has chosen to include the impacts of these types of projects in the travel demand model. Exempt tested projects include new commuter parking lots, rolling stock replacement, and road reconstruction with lane widening to standard widths (e.g., 10 feet to 12 feet).
- Exempt work types do not require an air quality conformity analysis. Examples
 of exempt work types are intersection improvements and rail station
 modernization.

The individual project sponsors have indicated a new bridge and interchange expansion to their respective projects for conformity analysis:

- TIP ID 12-06-0005: 80th Avenue (CH 83) from 183rd St to 191st St
- TIP ID 12-18-0006: Houbolt Road (I-80 to US Route 6)

These Regionally Significant Projects (RSP) indicate added capacity, therefore a change in project scope:

- TIP ID 01-18-0012: North Lake Shore Drive Improvements RSP 89
- TIP ID 09-10-0030: US 20 Lake St from W of Randall Rd to E of Shales Parkway RSP 113

The public website of the eTIP database is available through the hyperlink for current project information. Newly submitted changes are found in the 20-03 Conformity Amendments report.

The regional travel demand model was run using the updated networks. The resultant vehicle miles traveled (VMT) by vehicle class, speed, time of day, and facility type were entered into the US Environmental Protection Agency's MOVES 2014a model. The model generated on-road

emission estimates for each precursor or direct pollutant in each analysis year were produced using the new vehicle population file.

For ozone precursors volatile organic compounds (VOC) and nitrogen oxides (NOx), the resulting emissions inventories estimates fell below the applicable budgets for the ozone maintenance State Implementation Plan (SIP).

Direct PM2.5 and NOx Emissions in Tons per Year for PM2.5 Conformity

	Fine Particulate Matter		Nitrogen Oxides	
Year	Northeastern Illinois	SIP Budget	Northeastern Illinois	SIP Budget
2020	2,045.61	5,100.00	55,512.88	127,951.00
2025	1,286.37	2,377.00	32,208.69	44,224.00
2030	953.60	2,377.00	23,739.66	44,224.00
2040	849.68	2,377.00	20,562.86	44,224.00
2050	899.62	2,377.00	21,729.45	44,224.00

conformity is demonstrated by comparison of analysis year emissions to the SIP budgets

VOC and NOx Emissions in Tons per Summer Day for Ozone Conformity

	Volatile Organic Compounds		Nitrogen Oxides	
Year	Northeastern Illinois	SIP Budget	Northeastern Illinois	SIP Budget
2020	71.51	117.23	146.54	373.52
2025	53.21	60.13	85.08	150.27
2030	43.43	60.13	60.86	150.27
2040	33.91	60.13	51.46	150.27
2050	34.18	60.13	54.02	150.27

conformity is demonstrated by comparison of analysis year emissions to the SIP budgets

Notes:

Off-model benefits are not included in the total emissions estimates Results updated as of December 23, 2019

ACTION REQUESTED: Recommend finding of conformity and approval of TIP amendment 20-03 by the MPO Policy Committee.